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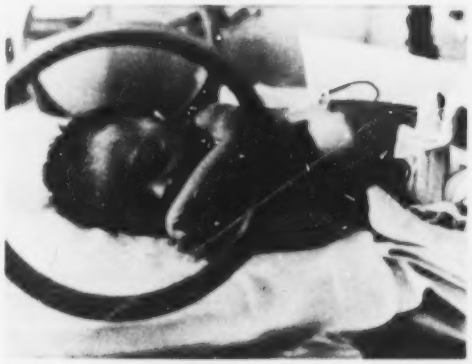

Credit: NIH photo

Child health reports looks at recent U.S. trends and stirs up some controversy (see page 3).

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Countdown for Mexico City

What should be the most important population meeting in a decade is now only five months off and coming down the tracks. Sponsored by the UN, the International Conference on Population (ICP) will take place Aug. 6 through 13, 1984, in Mexico City.

Its purpose: to help maintain the momentum already generated in world population activities, identify emerging problems for action and initiate programs in areas where no significant impact has yet been achieved. In particular, the meeting will review implementation so far of the World Population Plan of Action adopted at the landmark 1974 World Population Conference, held in Bucharest, Romania.

As at Bucharest, the attendees will be representatives of nations—perhaps 140 or 150 countries. These delegations will express their countries' policies and will, it's hoped, convey the findings and conclusions of the Mexico City meeting to their own governments, to be considered in future policy formation.

In short, the ICP will be a large-scale, week-long international meeting in what is perhaps the most populous city in the world (an estimated 16 million as of 1983). With delegations, UN support staff, observers from nongovernmental population organizations, and the media, it is likely that over a thousand people will be milling at the venue, the Tlatelolco* Center, the Conference Area of the Mexican Ministry of Foreign Affairs, located in the northwest of the city.

The 1974 Bucharest meeting was a population watershed of legendary proportions—not only among population specialists and world demographers, but among policymakers, and—perhaps—among historians of the future. It was there that national governments gave formal recognition to the magnitude and significance of ongoing global population growth trends; that debaters argued and resolved (to some extent) the debate about whether countries should put their resources into population-growth restraint or economic development, and whether (a much hotter issue then) development was the "best contraceptive" or impossible without contraceptives.

The result was the World Population Plan of Action, the unanimously adopted document that declared that all couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education, and means to do so.

This time no one expects any dispute about the importance of population issues, and the meeting is expected to confirm the main points and thrusts of the 1974 meeting's 10-year-old Plan of Action. But recommendations for action on new, population-related issues may be another story. The issues, and to some extent the direction, of the 1984 meeting's agenda still remain to be thrashed out by a UN preparatory committee to be held March 12-16 in New York, and the UN's Economic and Social Council (ECOSOC). The principal problems are cutting down the number or recommendations and focusing on priority issues.

Funding, however, is set for the August meeting (which is to be smaller in size than Bucharest). In addition to $800,000 of regular UN conference funds, UN Fund for Population Activities Director Rafael Salas has solicited the necessary $1.6 million in donations from about 27 countries, 19 of which are less developed. The largest national contribution has been Japan's ($500,000).

POPULATION TODAY will report further ICP developments as the countdown continues for Mexico City. □

*Pronounced Te-LAH-te-LOWL-co.

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Child Welfare Report Raises Infant Mortality Questions

A report released by the Children's Defense Fund (CDF), a private Washington organization, recently charged that the Administration's policies, along with economic recession, have set back many areas of child health and welfare.

The report treated a number of topics, and included in the major findings were the following:

- 13.1 million or 1 in 5 children in the U.S. live in poverty; for black children, the proportion is 1 in 2 and, for Hispanics, 2 in 5.
- 26 states showed increases in the percentage of women receiving late or no prenatal care.
- The average number of children on Aid to Families with Dependent Children (AFDC) per 100 poverty children declined from 72 percent in 1979 to 53 percent in 1982.

Reacting to these and other similar reports, Health and Human Services Secretary Margaret Heckler announced that a task force had been set up to explore ways to eliminate the black-white health differential.

The CDF also reported that infant mortality rates (IMR) were increasing in a number of states from 1981 to 1982. The CDF had collected IMR data at the state level and published it in the report well in advance of the National Center for Health Statistics.

While the black infant mortality rate is about twice as high as the white rate and has not declined as quickly, other evidence presented by CDF seems shaky. The report cited 13 states in which nonwhite IMRs rose from 1981 to 1982, but in fairness, it must be pointed out that it is not at all unusual for IMRs to fluctuate from year to year at the state level. This is probably due more to small numbers than longer-term trends in health. Even rates for large states can show yearly variation and, of the 13 states cited with a rising nonwhite IMR, Oregon had only about 25 nonwhite infant deaths annually in the late 1970s. □

Administration Tracking Demographic Trends

"Demographic trends of the last two decades have greatly influenced major institutions in American Society and have caused significant changes in public policies... Future trends will be at least as influential."

That quotation comes not from some data-marketing guru but from a Reagan administration report—one that the public will not see. Prepared last fall, the internal study was written for the Cabinet Council of Economic Affairs—one of about 10 such groups of cabinet secretaries that meet on a frequent basis to consider future national policy.

Though their study was made for internal consumption only and is unobtainable, the *Washington Post* typically gained access to a copy, and in January published excerpts that make intriguing reading.

"Unprecedented demographic changes are in store," the report says, "in the population's age structure, in the composition of families and households, in the economic and familial activities of women and men, in where people live, and in the numbers and characteristics of foreign immigrants."

The U.S. population will age, with, the study predicts, concomitant increases in productivity and income, and less unemployment as absolute numbers of young new workers entering the labor force stand pat or decline.

Because of the decline in numbers of young workers, the report also speculates that women will have an easier time entering the labor force and gaining higher pay, even without changes in national policy.

Another fallout from the aging population: older people tend to save more; thus, spending habits might grow less extravagant and savings rates would rise, helping to make capital available for investment without any change in present policies.

The Administration study views with alarm a "decline in the youth population" as far as filling the all-volunteer armed forces goes. It gives as an option relying on immigrants to fill the gap. (Which would be a possibly very controversial policy—and probably unnecessary, as the number of 18-year-olds in each year will only dip briefly by 10 percent during the mid-1990s, and otherwise should remain at above 3.5 million until 2050, according to Census Bureau projections.)

In the recent past the Administration has shown a great interest in the number of Hispanics in the U.S. And an administration official last year gave a number of demographic reasons for various social ills (e.g., black poverty was partly due to the number of female-headed black households, which was due to a demographic phenomenon.

Judging from these occasional signs and portents, it's evident the Reagan administration has a more than casual interest in demographics, as an explanation for past events and a guide to future ones—and perhaps, as a demographic escape hatch out of present economic and social problems. □

SURVEY REPORT

Ghana WFS

The Republic of Ghana, a West African nation of 14 million population, has recently published the first results of its Ghana Fertility Survey, taken as a part of the World Fertility Survey program in 1979-1980. The country's population is at present in a period of rapid growth, about 3.2 percent per year, which results from both high fertility and a declining death rate.

While Ghana is fortunate to have a more diverse economy than many other African countries, it is still a largely agricultural nation with cocoa accounting for about 60 percent of all exports. Ghana has been

Continued on next page

FROM THE EDITOR'S DESK

Elsewhere in this issue there's a reference to "about 10" U.S. Cabinet Councils. That's because the writer didn't want to make that one additional phone call to ascertain how many councils there are right now. (The councils are informal groups, their number changes as new ones are formed and old ones fall into disuse, etc., etc. In sum, the reluctant writer argued, what's the difference?)

Language can be wonderfully inexact when you want it to be. But why should ink-stained word persons like that staffer be able to get away with inexactitude when numbers people are tied to exact quantitifications? (Sometimes too exact, as Ralph Thomlinson pointed out in his January 1982 Demographer's Page on "Foolish Precision"; there's a time to write 5.5; a time to write 5½; and a time to write "about five.")

Maybe it's time to get down to cases and define what "about" really means. How much squiggle room is there in "about 10"? Is 10 the upper limit or the midpoint? Could it mean "between 8 and 12, with the highest probability at 10?" "9 to 11"?

And what about "a few" "a couple" "some"? Perhaps these could become standardized, a la standards in other fields (e.g., the German DIN [Deutsche Industrie Normen] standards for the design and quality of practically everything). Then we would all be on the same track!

Herewith, *PT*'s modest standards for quantifying words:

A Few = 2 to 4

Several = 3 to 5

A Couple = 4 to 6

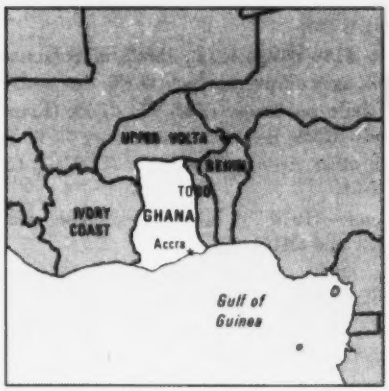
Some = 3 to 8; variation of 20 percent ("some eight members attended")

About = variation of 10 percent ("about 10 Cabinet Councils")

And finally, (and we're indebted to *High Fidelity* magazine for this one):

Less than, or greater than = damn close to ("less than 0.11 percent distortion," "more than 27 miles per gallon").

—Art Haupt



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able to maintain a small favorable trade balance, but the destruction in 1983 of about one-third of the country's cocoa farms by brush fires may prove to be at least a temporary setback. Continued expansion of the industries such as the production of steel from scrap will be needed to put the economy on a more reliable footing. At present, most industries depend upon imported raw materials, although recent oil and gas exploration holds hope of alleviating some of that dependence.

Ghana's coastline consists of a sandy scrub-covered shore; to the north, along the western border with the Ivory Coast, a belt of tropical rain forests called the Ashanti provides most of the country's cocoa and mineral production.

Another significant geographic feature of this Oregon-size country is the artificial Lake Volta, whose 3,275 square miles can provide hydroelectric power, a source of irrigation, inland transportation and potential fish farming.

The Ghana Fertility Survey conducted interviews with 6,125 Ghanaian women aged 15-49, using nine language versions in different areas. Survey results may be summarized as follows:

- Women in Ghana marry relatively early, 18.1 years for those 25 and over who had married before 25. Little difference in age at first marriage was noted between the older and younger women.
- 34.5 percent of wives were living in polygamous unions, 17 percent for women under 20 and 42 percent for women over 35. This difference may be due to a real decline in polygamy or in part to a life-cycle effect.
- The survey estimated a total fertility rate (TFR) of 6.3 for the period 1976-1978, based on survey questions on birth histories. Preliminary evaluation of the data indicate that fertility may have declined from about 7 children per woman in 1967-1969.
- Urban-rural differences in fertility were present, but not found to be large. For women married 20 or more years, rural women had had about 6.6 children each, all urban women 6.3, and those in the larger cities 6.0. Similar differentials were found by educational level.
- While infant mortality was estimated to decline from the early 1950s, from 111 infant deaths per 1,000 live births to 79 in the early 1960s, the decline appears to have leveled off, dropping to only 70 in 1978.
- On average, women in Ghana expressed a desire for about 6 children each, indicating that the current TFR matches actual childbearing. Only about 22 percent of those aged 35-39 indicated a wish to cease childbearing; that proportion rose to 38 percent for the 45-49 age group.
- Knowledge of contraception is moderately high, with 59 percent of the respondents saying that they had heard of a modern method. But of the currently married, fecund (able to have children) women, only 7 percent were using a modern method.

The government of Ghana has called the country's high fertility rates "inappropriate" in its Five-Year Development Plan and has made family planning services available to all regardless of ability to pay. A goal of reducing the population growth rate to about 1.8 percent per year by 2000 has been established. The results of the Ghana WFS suggest that existing cultural patterns and the desire for large families may make implementation of this program difficult. □

Asian Birth Data In U.S. Released

The National Center for Health Statistics has published final data on births to the U.S. Asian population for 1980 (Monthly Vital Statistics Report, Vol. 32, No. 10).

In 1980, there were a total of 82,454 births of Asian or Pacific Islander ancestry; this ethnic category has been separately identified since 1978. The West region accounted for 58 percent of Asian births and, nationwide, three states (California, Hawaii, and New York) had just over half. Asian mothers had a slightly higher percentage of low birthweight babies (less than 2,500 grams) than white mothers, 6.5 vs. 5.7 percent, but half that of black births, 12.5 percent.

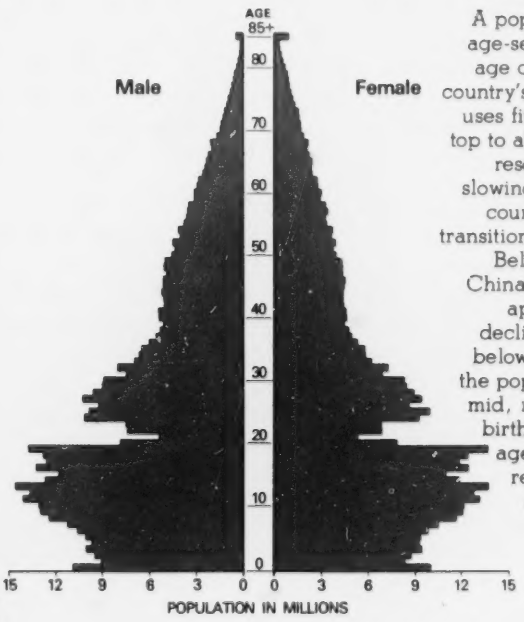
Asian mothers were more likely to delay prenatal care or have none than white mothers. Three-fourths of Asian mothers began prenatal care in the first trimester of pregnancy, compared to 79 percent for whites and 63 percent for blacks. Only 6 percent of Asian mothers had no prenatal care or delayed it to the last trimester, slightly more than whites (4 percent) and less than blacks (9 percent) □.

Number of Births for Selected Ethnic Groups, U.S., 1980

	Number
Total U.S.	3,612,258
Asian and Pacific Isl.	82,454
Chinese	12,792
Japanese	8,755
Hawaiian	6,497
Filipino	15,086
Other	39,224
White	2,898,732
Black	589,616

SPEAKING GRAPHICALLY . . .

China by Age and Sex



A population pyramid which shows age-sex structure by single years of age can tell us much more about a country's demography than one which uses five year age groups. From the top to about age 20, China's pyramid resembles a country with rapidly slowing growth and might suggest a country on a rapid "demographic transition."

Below age 20, the pyramid gives China a most unusual demographic appearance. Despite the recent declines in Chinese fertility, those below 20 account for nearly half of the population. Looking at the pyramid, it seems clear that the smaller birth cohorts of recent years (the age groups between 1 and 10) result at least in part from the drastically reduced numbers of women in their 20s, the most fertile years.

Source. Data from the 10 percent Sample Survey of the 1982 Third National Census of China, as reported in *Beijing Review*, January 16, 1984.

China's Age and Sex Structure: the 1982 Census

China's age-sex structure, recently available from the 1982 Census, reveals much about that country's demographic past and future. The country's population policy, in which the one-child family is strongly urged as a temporary measure to reduce the growth rate, has already had a pronounced effect upon age structure.

Since the previous census in 1964, the proportion of the Chinese population below age 15 has dropped from 41 percent to 34. To date, there has not yet been a dramatic increase in the proportion of the population above the Chinese definition of "working ages." Men aged 60 and over and women 55 and older comprised 7.8 percent of the population in 1964 and that figure rose to 9.3 in 1982.

Despite the vigorous family planning policy, no guarantee can be made that the number of births will continue to decrease in the next few decades. Built into China's age structure is a large "bulge" of persons below age 20 who are about to enter childbearing age. This large group results from China's "baby boom" which followed a sharp fertility decline during the disastrous Great Leap Forward in 1962. Demographer H. Yuan Tien has pointed out that both relaxation of strict marriage laws and the coming of age of the birth cohorts of the 1960s will undoubtedly place a great deal of upward pressure on the birth rate.

The population pyramid in this month's *Speaking Graphically* gives a dramatic illustration of China's demographic situation. Several additional aspects are worth noting. The age group under 1 at the bottom of the pyramid is distinctly larger than the preceding birth cohorts. An unusual feature for a developing country is the fact that the sex ratio at the older ages is rather high, 112 males per 100 females in the 50-54 age group, for example. □

DEMOGRAPHER'S

Sweden's Population Grows, Swedish Population Doesn't

by Murray Gendell

While that title may indeed seem odd, the example of Swedish demography provides a contemporary insight into population growth or decline.

Besides the numerical increase due to the arrival of immigrants, migration can have an indirect effect on a country's population growth due to the arrived immigrants' subsequent *natural increase*. In addition, some very interesting differences can often be observed in the births and deaths between the native-born and immigrant populations.

This phenomenon is particularly striking in Sweden's case. Looking at Sweden's population growth in 1970 (see Table 1), we note that the population was growing at nearly 1 percent per year (9.83 per 1,000 in the table), a relatively rapid pace by today's standard. Since 1970, the growth rate fell steadily, down to only 0.1 percent in 1981.

The main reason for the slowed population growth has been the decline in the birth rate, from 14 births per 1,000 population to the 11.3-11.7 range since 1976. At the same time, the death rate crept up from 10 to 11. While there have been gains in life expectancy, they have been outweighed by the increasing proportion of the elderly.

During the 1970s, the rate of net migration fluctuated quite a bit. From a high rate of 6 per 1,000 population in 1970, it dropped sharply, becoming negative in 1972 at -1.4. 1972 and 1973 are the only postwar years in which Sweden experienced a net outflow. The rate rose again to a peak of 2.89 in 1977, again falling to 0.3 in 1981, the latest year for which data are available.

Table 1: Components of Population Growth in Sweden, 1970-1981

	Number per 1,000 population							Mean population at end of specified year (000s)
Year	Births	Deaths	Natural increase	Immigration	Emigration	Net migration	Population increase[a]	
1970	13.70	9.95	3.75	9.61	3.56	6.05	9.83	8,081
1971	14.14	10.21	3.93	5.26	4.88	0.38	4.30	8,115
1972	13.82	10.35	3.47	3.68	5.12	-1.44	1.93	8,129
1973	13.48	10.53	2.95	3.62	4.96	-1.34	1.48	8,144
1974	13.46	10.58	2.89	4.59	3.47	1.11	3.91	8,177
1975	12.65	10.77	1.88	5.39	3.33	2.06	3.87	8,208
1976	11.96	11.03	0.93	5.53	3.10	2.43	3.34	8,236
1977	11.64	10.69	0.95	5.33	2.55	2.78	3.70	8,267
1978	11.27	10.84	0.43	4.37	2.68	1.69	2.08	8,284
1979	11.61	10.98	0.62	4.46	2.83	1.63	2.25	8,303
1980	11.68	11.05	0.63	4.74	3.54	1.15	1.78	8,318
1981	11.31	11.06	0.24	3.88	3.54	0.34	0.58	8,323

Source: National Central Bureau of Statistics, *Population Changes 1981, Part 3,* (Stockholm, 1982).

[a]Natural increase plus net migration should equal population increase. Minor discrepancies are due to transfers of persons with "residence unknown" to and from the population register.

Starting in 1975, the components of Sweden's population change began to exhibit a remarkable aspect: population growth due to migration exceeded that due to natural increase. This had not occurred before.

Just offhand, it would seem that Sweden's population would continue to grow as a result of natural increase. After all, even in 1981, the birth rate exceeded the death rate. But a closer look reveals that the gain due to natural increase has become dependent upon the natural increase of the immigrants. If we look at the difference between births and deaths for Swedish citizens and aliens separately,[1] we find that births of Swedish citizens, which had exceeded deaths by 22,000 in 1971, fell until natural decrease appeared in 1976 (see Table 2). That gap has been growing wider ever since, to −6,100 in 1982.[2]

Although a growing number of immigrants have been attaining Swedish citizenship, the category of "citizen" is still the virtual equivalent of "native-born." At the end of 1981, 96 percent of Swedish citizens were born in Sweden. Hence, we find that *native-born Swedes have been increasingly unable to reproduce themselves, and indeed since the late 1970s have seen their numbers decline.*

The natural increase of the aliens, on the other hand, has remained rather high, staying above 8,000 annually for the past decade. If it were not for this contribution to growth from the aliens, Sweden's population would be decreasing overall. Data for 1980 show just how wide the disparity is:

Rates per 1,000 Population

	Births	Deaths	Increase
Citizens	11.1	11.4	-0.3
Aliens	23.3	3.0	20.3
Total	11.7	11.0	0.7

PAGE

Murray Gendell is a demographer with the Center for Population Research and the Dept. of Demography, Georgetown University, in Washington, D.C.

Part of the difference between these two populations is due to the young age structure of the aliens. In 1980, 17 percent of the citizens were age 65 or over, but only 2 percent of the aliens were. And, while there is a large difference in the rates, part of this is due to age structure. In 1980, 20 percent of Swedish women were in the childbearing years of 15-44, but 28 percent of the noncitizens were. This difference is somewhat more important than varying fertility levels, 83 births per 1,000 women 15-44 for aliens, 50 percent higher than 56 for Swedish women.

Not only have Swedish citizens ceased reproducing themselves, but they have also, on balance, been *outmigrating* since at least the early 1960s. The annual *gross* emigration of citizens rose from less than 10,000 per year in the 1960s to between 10,000 and 15,000 during the 1970s. The *net* yearly loss also rose from about 1,000, peaked in 1970-1974 at about 4,200, dropped to about 1,500 in the late 1970s, and finally rose again to about 4,000 by 1981. Some caution must be used in looking at these data, since the number of these emigrants who may actually be naturalized citizens is not known (at least not to me).

The phenomenon of the fertility of immigrants helping to sustain population growth is probably found in other low-fertility European countries. If, in addition, more of the native-born population are leaving than entering their native land, then the cultural, linguistic, and religious composition of the population may be changing more rapidly than overall population trends would suggest.

The resulting changes could be quite drastic. A recent West German report, for example, said "if the current trend continues, the native German population is expected to fall from 56.9 million today to 38.3 million in less than 50 years."[3] It will be interesting in the future to observe the extent to which these novel demographic trends in various European countries are viewed with either relative indifference or alarm. □

Table 2: Natural Increase Among Swedish Citizens and Aliens in Sweden; 1971-1981

	Excess of births[a] over deaths		
Year	Swedish citizens	Aliens	Total
1971	22,116	9,651	31,767
1972	19,194	9,023	28,217
1973	15,779	8,244	24,023
1974	15,365	8,193	23,558
1975	7,266	8,158	15,424
1976	−600	8,268	7,668
1977	−232	8,087	7,855
1978	−4,602	8,169	3,567
1979	−3,235	8,416	5,181
1980	−3,321	8,585	5,264
1981	−6,110	8,141	2,031

Sources. National Bureau of Statistics, *Population Changes*, Part 3, for each of the years listed above.

[a]Births according to citizenship of the mother.

Footnotes

1. Swedish data are shown by citizenship but not by nativity.
2. These conclusions do not change substantially if father's citizenship or the citizenship of either parent is used.
3. *Washington Post*, Jan. 10, 1984, p. A10.

1985 IUSSP Conference Slated for Florence

Population specialists will meet for the International Union for the Scientific Study of Population (IUSSP) general conference to be held in Florence, Italy, June 5-12, 1985. IUSSP is a nonprofit worldwide association devoted to focusing attention on population problems and to promoting demography as a science. Formal sessions at the conference will deal with such topics as infant mortality, urban population growth, and mathematical demography. This conference, held once every four years, is expected to involve more than a thousand demographers, statisticians, economists, anthropologists, and others concerned with population problems.

For further information and registration, contact: Bruno Remiche, Executive Secretary of the International Union for the Scientific Study of Population, Rue des Augustins 34, B-4000 Liege, Belgium. □

POSITIONS/ PROFESSIONALS

Positions available in population-related fields will be published in POPULATION TODAY without charge, on a space-available basis. Send information to Positions/Professionals, POPULATION TODAY, 2213 M St. N.W., Washington, D.C. 20037. Positions listed in PT are provided by Equal Opportunity Employers.

Assistant Director. Association for Voluntary Sterilization, to serve as Deputy Director, World Federation, in the Director's absence; supervise support staff; overseeing administration procedures; assist in budget planning. *Qualifications:* graduate degree in public health, public or business administration, or related discipline; 5-8 years program development or organizational development experience at a professional level in a family planning or health-related organization; intercultural/international work experience and foreign language skills (French or Spanish) preferred. *Salary:* $28,174-$33,000. *Contact* Marilyn Reidlinger, Personnel Officer, AVS, 122 East 42nd St., New York, N.Y. 10168. (212) 573-8271.

Program Officer. Association for Voluntary Sterilization, to plan and implement international projects related to voluntary surgical sterilization, prepare background materials, handle program and technical details. *Qualifications:* 3-5 years relevant project development and implementation experience in the health/family planning field; masters degree or equivalent work experience in health-related field; demonstrated writing skills; good fact-finding and library research skills; foreign language skills (French or Spanish) desirable. *Salary:* $23,242 to $27,500. *Contact:* Marilyn Reidlinger, Personnel Officer, AVS, 122 East 42nd St., New York, N.Y. 10168. (212) 573-8271.

LETTERS TO THE EDITOR

This note is a quick response to Leon F. Bouvier's "Demographer's Page" "Projections: Always Right, Always Wrong" in the November/December 1983 INTERCOM.

Bouvier suggests the use of a pair of alternative assumptions "representing the opposite ends of 'reality'" so that resulting projections can realistically be expected to bracket actual future demographic trends. It seems to me that this conception is open to question with respect to migration flows involving more than two places. If we think in terms of patterns of net migration among the 50 states, the situation is far more complex. We have certainly seen shifts in the past in patterns of population redistribution resulting from migration, and it is far from plausible that the pattern experienced from 1970 to 1980 is the only one possible in the future.

My point is not that the particular assumptions Bouvier suggests are bad ones. Rather it is that since the complexity of interstate migration flows may alter along more than one dimension (both pattern and level), no pair of assumptions can represent the opposite ends of reality and therefore be confidently expected to bracket what will actually happen.

In fact, possible shifts in the pattern of migration could take an infinite number of forms. Naive users of population projections could therefore be seriously misled by the suggestion that varying the assumed level of net migration within reasonable limits, while allowing for no variation in its pattern, captures the range of likely variation in effects of migration on local population size.

Sincerely,
Sara R. Millman,
Assistant Professor, Population Studies and Training Center, Brown University

State of the World 1984

The just-published *State of the World 1984* is the first of an annual series conducted by the Washington-based Worldwatch Institute. Through these global assessments, the Institute aims to measure how changes in the world's resource base affect the global economy.

Project Director Lester R. Brown and his five co-authors focus on seven key areas:

- **Dependence on oil:** The study finds that dwindling oil supplies and their effect on world oil prices, continue to pose the most immediate threat to sustained economic growth. Since the 1979 price rise, the rate of world consumption has fallen from 2.15 barrels per $1,000 of economic output to 1.74 barrels, a drop of almost 20 percent.
- **Soil conservation:** According to the Worldwatch report, close to half the world's cropland is losing topsoil at a debilitating rate. Even in the United States the loss of soil through erosion exceeds new soil formation on over one-third of the cropland.
- **Population:** World population growth has slowed from 1.9 percent in 1970 to 1.7 percent in 1983 and in 12 European countries, population growth has come to a halt.
- **Renewable energy resources:** Although world population growth appears to be slowing, the need for energy resources continues to grow. Considering nuclear power to be an economic disappointment, the Worldwatch book looks at other renewable energy resources such as wood fuel, and wind, solar, and hydroenergy.

Burch portrait unveiled. A portrait of Guy Irving Burch (1899-1951) who founded PRB in 1929, was unveiled in December at PRB's headquarters building. Shown above with the new picture are (left to right) Wilhemina Burch Gibboney, Burch's widow; Sue Dillon, the daughter of the Burches; and Mrs. Dillon's husband Robert Dillon, former U.S. Ambassador to Lebanon. The portrait was drawn in pastels by Jill Cohen.

Recycling: The Worldwatch report finds that due to increasing energy costs, the recycling of such materials as paper, steel, and aluminum is also on the rise.

- **Protection of biological support systems:** Increased population has put added pressure on the world's forests, particularly those of Third World nations. In addition, forests in the northern tier of industrial countries are now threatened by acid rain and air pollutants.
- **Militarization:** Third World countries now spend more on the import of arms than on the import of grain.

The report concludes that in order to get the world back onto a sustainable development path, countries must reorder their priorities. As Brown puts it: "the issue is not technology or resources, but awareness and political will." He assures us, "the problems we face are of our own making, and thus within our control."

State of the World—1984 (Norton) is available in hardcover at a discount to PRB members. Send $8.00 to PRB, P.O. Box 35012, Washington, DC 20013. The price to nonmembers is $15.95. (PRB assists Worldwatch Institute in distribution of its publications.)

NEW FROM PRB

Food and Population: A Global Concern (14-page teaching module) by Elaine Murphy and "The Paradoxes of World Hunger" (INTERCHANGE, December 1983 issue) address the problem of hunger in the world. An estimated 500 million people, almost all rural dwellers in developing countries, are undernourished. Poverty is considered the chief cause; many specialists believe that the only lasting answer to the hunger problem is an increase in local food production, but how best to do this remains a challenge. The module, with hunger information for high school and undergraduate students, and INTERCHANGE, with teaching approaches and classroom activity suggestions for their teachers, were prepared by PRB's Population Education department.

"Saint Lucia: Yesterday, Today, and Tomorrow" by Leon F. Bouvier. Continuing PRB's *Occasional Series on the Caribbean*, this 17-page booklet summarizes the population dynamics of this small (estimated population, 124,000, as of 1982) agricultural nation, which faces long-term population questions posed by increasing density and median age.

Food and Population: A Global Concern and "The Paradoxes of World Hunger" are being sent to PRB's Educator members. Sets containing both of these teaching materails are available for $2.00 per single set; 2 or more sets, $1.75.

Copies of "Saint Lucia: Yesterday, Today and Tomorrow" are available for $2.00 each.

Orders of $20 and under must be prepaid and include $1.00 postage and handling. Send order and remittance to PRB, Circulation Dept., PO Box 35012, Washington, D.C. 20013. Checks payable to: PRB).

WORLD FOOD NEWS

The food supply situation for Africa remains serious, the FAO reports, with two more nations added to the list of countries facing grave food shortages. About 1.3 million tons of food and nearly $100 million in agricultural assistance is required to meet the immediate needs of the 24 countries. Cereal production in the affected countries has dropped to an estimated 16.3 million tons in 1983 from 17.6 million in 1982 and 19.7 million the year before.

The latest figures are in the third situation report of the FAO/World Food Program (WFP) Special Task Force on Africa. The Task Force added Guinea Bissau and Upper Volta to its previous list of 22 East, West, and Southern African countries beset by food shortages (for up to two years, in some cases) stemming from drought, livestock diseases, pests, and other causes, including civil strife.

The total cereal import requirements of the 24 nations are currently estimated at 5.3 million tons, of which 3.3 million tons are estimated to be food aid requirements. With known food aid pledges totalling 2 million tons to date, there remains a food aid gap of 1.3 million tons of cereals.

Of this gap, the Task Force recommended the urgent delivery of 700,000 tons of cereals to arrive before the end of March 1984.

"Further assistance is required particularly by Mozambique and Zambia in Southern Africa, by most of the affected countries in West Africa and by Ethiopia and Somalia in Eastern Africa," the group said. "The urgent delivery of pledged assistance is required in particular by Lesotho, Mozambique and Tanzania."

The Task Force also called for a total of $97.86 million to rehabilitate food crop and livestock production, for postemergency measures and preparation against possible future calamities, and for supplementary assistance in the affected countries. The figure is broken down as follows:

- *$31.1 million* for food crop seeds, plant protection chemicals and fertilizers, and for handtools in some countries.
- *$17.81 million* to rehabilitate livestock production through the supply of vaccines, equipment and logistic support in controlling major livestock diseases as rinderpest.
- *$43.45 million* to support agricultural postemergency and disaster measures in 15 of the 24 countries, mainly seed; also funding for food reserves, and for soil and water conservation.
- *$5.5 million* for supplementary assistance, including the improvement of domestic transport and distribution capacities. □

World Food News is prepared by the North American Liaison Office of the Food and Agriculture Organization of the United Nations.

CORRECTIONS

The article "Pregnancy Data Base Established by AIR" in the January 1984 issue of POPULATION TODAY misattributed the source of the project; in fact, the U.S. Dept. of Health and Human Services's Office of Population Affairs is the sponsor and originator of the Data Archive on Adolescent Pregnancy and Pregnancy Prevention; the American Insitutes for Research is constructing the data base.

The U.S. population pyramids appearing on page 5 of the February 1984 issue of PT should have carried labels denoting the "males" (left) and "females" (right) halves of the pyramid.

Population Update

Estimated United States Population:

As of Nov. 1, 1983	235,059,000
As of Nov. 1, 1982	232,903,000

The above estimates include armed forces overseas and are from U.S. Bureau of Census, Population Division.

Estimated World Population:

As of March 1984	4,739,000,000
Annual Growth	83,000,000

Estimated by extrapolation of the mid-1983 population given on the 1983 World Population Data Sheet.

Latest Provisional Statistics for the U.S.: October 1983

	12 months ending with October					
	Number		Rate			
Item	1983	1982	1983	1982	1981	1980
Live births	3,663,000	3,682,000	15.7	15.9	15.9	15.9
Deaths	2,010,000	1,978,000	8.6	8.6	8.7	8.7
Natural increase	1,653,000	1,704,000	7.1	7.3	7.2	7.2
Marriages	2,434,000	2,498,000	10.4	10.8	10.6	10.7
Divorces	1,182,000	1,183,000	5.1	5.1	5.3	5.2
Infant deaths	39,800	41,800	10.9	11.4	11.8	12.6
Population base (in millions)	...	...	233.4	231.1	228.9	226.7

Note. Rates are given per 1,000 population, except for infant deaths, which are given per 1,000 live births. Rates are based on revised population estimates from the 1980 Census.

Source. Monthly Vital Statistics Report (Vol. 32, No. 10) from the National Center for Health Statistics.

Opinion

by Robert Fox

When it comes to communicating the basic facts of population growth, those of us in the population field are not doing a very good job. The reason I say this is twofold. First, the fundamentals of world population growth are really quite simple to understand (certainly no more difficult than concepts such as the inflation rate or simple economics, topics given frequent media coverage). Yet, and secondly, articles in the press reflect a continuing confusion on the "population bomb." We have a contradictory situation. What amounts to a simple message to deliver seems to have us stymied.

There are probably any number of reasons for this paradox, some of which I think I know, but other reasons must elude me. While demography hardly has the mass appeal or interest of an inflation rate, there are plenty of people out there who really *do* want to know. While reporters are naturally attracted to population when it is a "story," they are a professional group who also want to get the facts straight. So why is the "population bomb" a problem one week but "defused" the next?

The basic facts of world population growth change only slowly. True, birth rates in some developing countries have decreased, but public understanding of population is evidently weak because reports of such decreases lead to unwarranted assumptions on the end of population growth in the near future.

The reality is that the world population situation is *important* and will become much more so in coming decades. Overall, world population is expected to grow to just over 6 billion 16 years hence from the present 4.7 billion and continue to 11 billion, perhaps considerably more, in the next century. This increase of humankind's number is one of the most significant events in history. It seems strange that so few really understand it. Any ideas on just how to get the factual message across?

Robert Fox is a social analyst at the Inter-american Bank in Washington, DC. All opinions expressed above are Dr. Fox's and do not necessarily reflect those of the Bank.

TAKE A NUMBER...

Migration's Revolving Door: Many statistics on *net* migration hide a great deal of population movements. States often have a large number of people coming and going, although the net balance may not be very impressive. From 1975 to 1980, for example, Mississippi lost 2,210 people due to migration. But this was a result of 213,197 persons moving in, passing 215,407 moving out, for a total of 428,604 "moves." California gained 94,458 persons by migration: perhaps not an impressive number, but that net resulted from a total of 3.7 *million* migrants in and out.

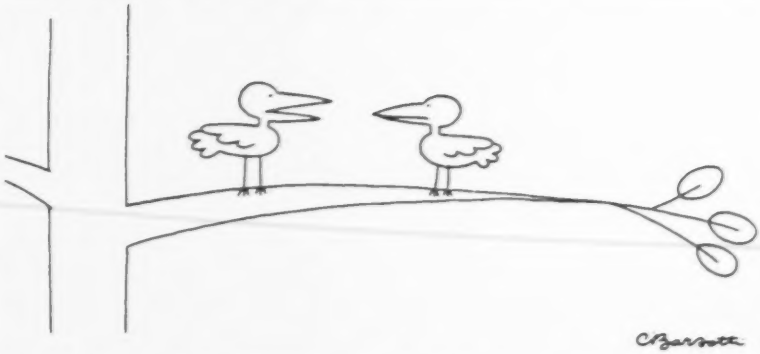
Germans to Count After All: The long delayed census of West Germany, originally scheduled for 1980, has now been upheld in the Constitutional Court, according to *International Demographics*. Before it can actually be taken, however, legislation must be passed to ensure public protection against the indiscriminate use of personal data (although no instances of this had ever been reported).

Natural Decrease on Sweden's Horizon?: Preliminary vital statistics for Sweden in 1983 indicate that Sweden is now approaching natural decrease with births barely numbering deaths. 92,000 to 91,000, according to the Central Statistics Office's *Statistiska meddelanden* for 1983. It is anticipated that 1984 will likely bring natural decrease, although a small amount of net immigration (2,000) may hold off overall population for a time. (See Murray Gendell's discussion of Sweden on p. 6).

Health Care Pricetag Way Up: "Sticker shock" is well entrenched in the health care field. The Dept. of Health and Human Services reported that 1982 health care expenditures totaled $322.4 billion in 1982. This represents an increase of 29.5 percent over 1980 and *331.6* percent over 1970. In 1982, health care outlays averaged $1,365 per person and constituted 10.5 percent of the gross national product.

What Will Future U.S. Life Expectancy Be?: The National Center for Health Statistics has addressed this question, of obvious interest to us all, in a recent issue of *Vital and Health Statistics*. Assuming that the improvement in health conditions observed for the decade 1966-1976 were to continue, overall life expectancy at birth would reach about 79 years by 2003, 84 for females and 74 for males. In 1982, overall life expectancy was 74.5.

addenda...



"Go South if you wish. I feel it's important for me to demonstrate my continuing faith in the viability and strength of the Northeast." Drawing by C. Barsotti; ©1983, The New Yorker Magazine, Inc.

CURRENT READINGS

PRB welcomes materials on population topics for possible inclusion in Current Readings. Publishers may address review copies to Book Review Editor, POPULATION TODAY, Population Reference Bureau, 2213 M St., N.W., Washington, D.C. 20037.

CURRENT ISSUES IN MARRIAGE AND THE FAMILY (3rd ed.), edited by J. Gipson Wells. New York: Macmillan, 1983. 315 pages. Paper. $14.95. ISBN 0-024-25480-0

This is not a book for scholars unless they are scholars of public opinion, American style. The 27 articles in this collection are drawn largely from popular magazines—*Look, Redbook, Playboy, Harper's Bazaar, Ebony*—plus a few from the more "thoughtful" periodicals such as *The National Observer* and *Commonweal*. Here and there an article from a professional journal appears, e.g., *New England Journal of Medicine* or *Intercom*, venerable ancestor of *Population Today*..

A sampling of titles reveals the range of topics: "Women Should Stay Single," "Is Monogamy Outdated?," "Why Living Together Was Not Enough?," "Motherhood: Who Needs It?," "Inside An Abortion Clinic," "The Divorce Mess: A Solution," "The Case for Joint Custody," "Charlie's Final Fling," and "What's Happening to the American Family?."

After several hours with *Current Issues in Marriage and the Family*, one feels something akin to having been locked overnight at the dentist's office with nothing to read but the "juiciest" articles from old magazines. Indeed, many of the articles are over a decade old and one is 15 years old.

That being said, this collection would be an entertaining way to introduce high school or undergraduates to the field of family sociology. The editor provides a professional commentary between the major sections, along with references to the more standard literature in the field.

This lively paperback might ignite students' interest in research that a more didactic tome would extinguish.

—*Elaine M. Murphy*

INTERNATIONAL MIGRATION POLICIES AND PROGRAMMES: A World Summary, by the United Nations. Population Studies No. 80. New York: United Nations. 111 pages. ST/ESA/SER.A/80., Sales no. E.82.XIII.4. $10.00.

International migration is an increasingly sensitive political issue because it involves, among other things, questions of national security and identity. Also, the study of migration patterns throughout the world provides an overview of which countries are or are not economically and politically secure. The United Nations Population Division has produced an extremely useful summary of the patterns of international migration and the policies governments have adopted to deal with it. As the authors point out, contemporary migration is different from the past, characterized by a south/north flow of workers rather than a movement of settlers from the old to new worlds. While Australia, and many new world countries recruited immigrants in the past, the current need for permanent settlers is quite limited. Countries usually invite immigrants in to deal with labor shortages and in most cases, both the government and the native populations hope their stay will be temporary. But once arrived, the aliens establish their own communities and can threaten to achieve political importance. This was the situation with the guestworkers in Europe and with the Arab and Asian laborers in the Mid-Eastern OPEC countries. Illegal migration is increasing in all world regions as a response to disparate economic conditions, and in some countries serves as a de facto guestworker program. Governments are moving toward stricter controls on illegals, although they have little data showing the volume, let alone the economic effects of clandestine immigration. Finally, refugee movements are becoming increasingly important. Although the overall numbers are small compared to other types migration, some refugee movements are occurring in Africa on a truly massive scale.

—*Mary Kent*

POPULATION INFORMATION IN NINETEENTH CENTURY CENSUS VOLUMES, by Suzanne Schulze. Phoenix, Ariz.: Oryx Press, 1983. 446 pp. $65.00. ISBN 0-89774-122-6. LC 83-17380.

This volume would be a blessing to anyone conducting research on 19th Century population or related issues. Coverage is restricted to censuses in the United States (a fact that the title might have noted) from 1790 to 1890. The section on each census is preceded by a brief sketch of how it was taken. We learn that the 1830 Census was the first to use a printed schedule and that the 1890 Census first used a separate form for each household.

For each census, there is a detailed description of what subjects were covered by the census and information was published in each volume. Listings are given for titles, publications dates, SUPCOD, LC, and Dewey system classifications. Also included is the "Dubester number" a system devised by Henry J. Dubester of the Census Bureau library in the 1940s. The book includes a guide to microform storage which tells us, for example, that the Abstract of the 1850 Census volume is in the National Archives on Film T825, Reel 6. All in all, an exhaustingly researched guide to U.S. Census history.

—*Carl Haub*

ETHNIC DILEMMAS: 1964-1982, by Nathan Glazer. Cambridge, Mass.: Harvard University Press, 1983. 359 pages. $20.00. ISBN 0-674-26852-0.

This book collects two decades of essays pondering the U.S.'s ethnic unity/diversity and the tensions therein (an essay on Europe's present ethnic problems is also included). Glazer, a prime mover of neo-conservatism and co-author of *Beyond the Melting Pot* with Daniel P. Moynihan, tends to come out on the unity end, e.g., dubious of bilingualism. His essays are well-rounded and considerate of all sides to questions, and *Ethnic Dilemmas* is perhaps most interesting as a record of a thoughtful mind encountering the tumultuous and surprising ethnic events of the era—from civil rights to affirmative action to the new pluralism emerging in the 1980s.

—*Arthur Haupt*

PUBLICATIONS RECEIVED

EDUCATION AND DEVELOPMENT: VIEWS FROM THE WORLD BANK by A. Hbate and G. Psacharopoulos. Washington, DC: The World Bank. 1983. 26 pp.

THE EGYPTIAN FERTILITY SURVEY, 1980. Cairo: The Central Agency for Public Mobilisation and Statistics and the World Fertility Survey. 1983. 4 vols.

MARITAL STATUS AND FERTILITY: A COMPARATIVE ANALYSIS OF WORLD FERTILITY SURVEY DATA FOR TWENTY-ONE COUNTRIES. New York: United Nations Population Division. 1983. ST/ESA/SER.R/52. 107pp.

HEALTH: UNITED STATES AND PREVENTION PROFILE 1983: Hyattsville, MD: The National Center for Health Statistics. 1983. 394 pp.

INCOME OF THE POPULATION 55 AND OVER. Washington, DC: Social Security Administration. 1983. 80 pp.

DEMOGRAPHY OF THE BLACK POPULATION IN THE UNITED STATES: An Annotated Bibliography with a Review Essay, by Jamschid A. Momeni. Westport Conn.: Greenwood Press, 1983. 345 pages. $35.00. ISBN 0-313-23812-X.

MANUAL X, INDIRECT TECHNIQUES FOR DEMOGRAPHIC ESTIMATION, POPULATION STUDIES NO. 81. New York: United Nations Population Division and the National Academy of Sciences. 1983. 304 pp.

MEXICAN IMMIGRANT WORKERS IN THE U.S. by Antonio Rios-Bustamante. Los Angeles: Univ. of California, Chicano Studies Research Center. 1981. 178 pp.

1981 CENSUS STUDY (WORKING PAPER 4), RECENT FERTILITY TRENDS AND DIFFERENTIALS IN AUSTRALIA. Canberra: Dept. of Immigration and Ethnic Affairs. 1983. 99 pp.

SPOTLIGHT

BARBADOS

Population, (est., 1983): 250,000
Pop. per square mile: 1,530
Births per 1,000 pop., 1980: 16.7
Deaths per 1,000 pop., 1980: 8.1
Infant mortality rate, 1980: 22.7 deaths per 1,000 live births
Annual rate of population growth, 1980: 0.3 percent
Area: 155 square miles (about the size of two Districts of Columbia)
GNP per capita, 1981: US $3,500
Major exports 1979: sugar, sugarcane products, clothing—$562 million
Major imports 1979: food, machinery, manufactured goods, chemicals—$589 million

The small island of Barbados situated just east of the Windward Islands in the East Caribbean, is one of the most demographically interesting of the world's developing countries. Barbados was among the first nations to advocate a national system of family planning. A 1954 report of a joint committee of birth legislation strongly recommended the institution of a "system of family planning under the aegis of the government." Its 1980 total fertility rate of 1.9 live births per woman, not only attests to the success of that program, it is among the lowest of any developing nation.

At the first post emancipation census in 1844, Barbados's population was 122,298. About one century later in 1946, the national census enumerated 193,680 Barbadiens. To a considerable extent, this very low rate of growth (0.46) percent annually) is due to substantial emigration, first to Trinidad and Guyana and later to countries outside the region such as the United Kingdom and more recently the United States and Canada. Net emigration between 1981 and 1921 was so great that it exceeded natural increase (i.e. births minus deaths) by 54 percent. As a result, the population declined from 182,867 to 156,724.

By 1960, Barbados's population had reached 232,820, some 40,000 more than in 1946. Since then growth has been slow. The 1970 census counted 235,229 persons; the 1980 census, 244,228. The average annual rate of growth during the 1970s was a very low 0.37 percent.

Such a remarkably low rate of growth since World War II has been accomplished through continued high levels of emigration combined with declining fertility and mortality. Fertility has fallen dramatically. The total fertility rate fell from 4.7 in 1960 to 3.0 in 1970 to 1.9 in 1980. Life expectancy has risen from about 50 in 1946 to 70 in 1980—a level comparable to many developed nations.

Levels of net emigration have always been high and remain so today. About 18,000 more persons left the country than entered it during the 1970s—a rate of 7.5 per 1,000 population. While high, it nevertheless is lower than in the 1960s. Indeed, if there had been no emigration since 1950, the 1980 population of Barbados would approach 370,000 rather than 244,000.

Sugar and tourism are mainstays of the Barbadian economy. Since independence in 1966, sugar production has, however, fallen steadily in response to depressed world sugar prices as well as increasing production costs. In recent years, the government has sought to reduce dependency on the sugar industry. Tourism, which was adversely affected by the world recession shows some signs of recovery and the discovery of some petroleum and natural gas may help. In 1981, petroleum was being exported at the rate of 700 barrels per day.

Barbados has one of the most developed infrastructures in the Caribbean and the government hopes to deal with current problems through diversification of the economy. Tax incentives should help attract light manufacturing and the promotion of crops such as Sea Island cotton should also reduce the dominance of sugar in the economy. With the country's good educational system and high literacy rate (97 percent), a continued shift away from an agrarian economy seems possible.

Barbados is the most densely populated country in the hemisphere, and specialists agree that even a future population of 300,000 may be beyond the island's capacity. If fertility remains low and net emigration continues, that number will not be reached, but because of high 1950s fertility, the labor force is expected to increase by some 25 percent by the turn of the century—a serious issue, considering that current unemployment is already 14.7 percent. Later, after 2015, Barbados will be faced with an "elderly problem." Its 65-and-over population is expected to grow from its current 25,000 to 40,000.

Given its current demographic behavior, however, Barbados is in a better position to address and solve these problems than most developing nations. The Barbados Family Planning Association is firmly established; Barbados is a highly literate and educated population; women are becoming increasingly involved in economic and political matters. Together there are ingredients necessary for Barbados to solve any demographically related problems it will face in the foreseeable future. □

Lee Bouvier, PRB

Family planning clinic, Barbados.